A.D. 1864, *27th May.* N° 1313.

Bottle Holders.

LETTERS PATENT to Henry Millington Harwood, of Birmingham, in the County of Warwick, Manufacturer, and George Whitford, of St. John's Wood, in the County of Middlesex, Jeweller, for the Invention of "IMPROVEMENTS IN BOTTLE HOLDERS."

Sealed the 18th November 1864, and dated the 27th May 1864.

PROVISIONAL SPECIFICATION left by the said Henry Millington Harwood and George Whitford at the Office of the Commissioners of Patents, with their Petition, on the 27th May 1864.

We, HENRY MILLINGTON HARWOOD, of Birmingham, in the County of Warwick, Manufacturer, and GEORGE WHITFORD, of St. John's Wood, in the County of Middlesex, Jeweller, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN BOTTLE HOLDERS," to be as follows:—

Our Invention consists of the improvements herein-after described in bottle holders, by which improvements the bottle holders are made very convenient in use, and capable of being made highly ornamental.

In one of our improvements we make the bottle holder so that the bottle may be introduced from the top. In this case we fix to the base of the holder two vertical curved plates, which with a third plate hinged thereto make a case which embraces the bottle. The hinged plate is furnished with a spring, which presses it into a vertical position. In order to introduce the bottle into the holder the hinged plate is turned aside, and the bottle lowered on to the base. The hinged plate is then allowed to close upon the bottle when the

bottle is secured to the holder. The moveable plate may be secured to the fixed plates by a collar at the top of the case being made to connect the said moveable and fixed plates.

In another of our improvements the bottle is introduced into the holder from below. The holder has the general figure of the bottle, and the bottom of the holder is hinged to the body; by turning down the bottom the bottle may be introduced into the holder; the bottom may be fastened when closed by means of a spring catch or bolt.

In another of our improvements the body and base of the holder are made separate, and connected with and disconnected from each other by fastenings resembling in construction and action the bayonet-joint fastening. The base is provided with a central spring stem, on which the concave bottom of the bottle rests, and by which the bottle is pressed on to the body of the holder. The bottle may either be placed on the base, and the body of the holder placed upon it and fastened to the base by pressing down and partially turning the body; or the bottle may be introduced into the body, and the base placed under the bottom of the body, and fastened to the body by pressing it against the body and partially turning it.

In another of our improvements the case is made in two or more parts, which are hinged together, and may be opened for the introduction of the bottle. When closed the case may be fastened by a spring fastening, or by a collar of the kind herein-before described with respect to our first improvement.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Henry Millington Harwood and George Whitford in the Great Seal Patent Office on the 24th November 1864.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, HENRY MILLINGTON HARWOOD, of Birmingham, in the County of Warwick, Manufacturer, and GEORGE WHITFORD, of St. John's Wood, in the County of Middlesex, Jeweller, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-seventh day of May, in the year of our Lord One thousand eight hundred and sixty-four, in the twenty-seventh year of Her reign, did, for Herself, Her heirs and successors, give and grant unto us, the said Henry Millington Harwood and George Whitford, Her special licence, that we, the said Henry Millington Harwood and George Whitford, our

executors, administrators, and assigns, or such others as we, the said Henry Millington Harwood and George Whitford, our executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN BOTTLE HOLDERS," upon the condition (amongst others) that we, the said Henry Millington Harwood and George Whitford, our executors or administrators, by an instrument in writing under our or their hands and seals, or under the hand and seal of one of us or them, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Henry Millington Harwood, on behalf of myself and the said George Whitford, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

Our Invention consists of the improvements herein-after described in bottle holders, by which improvements the bottle holders are made very convenient in use, and capable of being made highly ornamental.

In one of our improvements we make the bottle holder so that the bottle may be introduced from the top. In this case we fix to the base of the holder two vertical curved plates, which, with a third plate hinged thereto, make a case which embraces the bottle. The hinged plate is furnished with a spring, which presses it into a vertical position. In order to introduce the bottle into the holder, the hinged plate is turned aside and the bottle lowered on to the base. The hinged plate is then allowed to close upon the bottle when the bottle is secured to the holder. The moveable plate may be secured to the fixed plates by a collar at top of the case being made to connect the said moveable and fixed plates.

In another of our improvements the bottle is introduced into the holder from below. The holder has the general figure of the bottle, and the bottom of the holder is hinged to the body. By turning down the bottom the bottle may be introduced into the holder. The bottom may be fastened when closed by means of a spring catch or bolt.

In another of our improvements the body and base of the holder are made separate, and connected with and disconnected from each other by fastenings

resembling in construction and action the bayonet-joint fastening. The base is provided with a central spring stem, on which the concave bottom of the bottle rests, and by which the bottle is pressed on to the body of the holder. The spring stem described may be applied to bottle holders of various constructions. The bottle may either be placed on the base, and the body of the holder placed upon it and fastened to the base by pressing down and partially turning the body; or the bottle may be introduced into the body, and the base placed under the bottom of the body and fastened to the body by pressing it against the body and partially turning it.

In another of our improvements the case of the holder is made in two or more parts, which are hinged together or to the base, and may be opened for the introduction of the bottle. When closed the case may be fastened by a spring fastening, or by a collarof the kind herein-before described with respect to our first improvement.

Having explained the nature of our Invention, we will proceed to describe, with reference to the accompanying Drawings, the manner in which the same is to be performed.

Figure 1 represents in side elevation one form of bottle-holder constructed according to our Invention; Figure 2 is a plan of the same, and Figure 3 is a section of the same, the bottle being omitted.

The said holder consists of a base *a*, provided with two vertical curved plates *b*, *c*, fixed to the said base *a*, and a third curved plate *d* hinged at *e* to the said base *a*. The three plates *b*, *c*, *d*, constitute a case which embraces the bottle *f*. The hinged and moveable plate *d* is furnished with a spring *g*, which presses it forward into a vertical position and makes it firmly embrace the bottle. One end of the spring *g* is fixed to the bas *a*, and the other and free end works through a loop *h* on the plate *d*, as represented in Figure 3. In order to introduce the bottle *f* into the holder, the hinged plate *d* is turned aside into the position indicated by dotted lines in Figure 3, and the bottle lowered on to the base *a*. The hinged plate *d* is then allowed to close upon the bottle, when the bottle is secured to the holder, as represented in Figures 1 and 2. The moveable plate *d* may be secured to the fixed plates *b*, *c*, by means of a collar at the top of the case being made to connect the said moveable and fixed plates, or the plates may be fastened together in any other convenient way. The holder may, however, be used without any fastening. Instead of hinging one only of the plates of the holder to the base, the whole of the plates may be hinged to the base and made capable of moving outwards from the axis of the holder; the said plates being constructed in the manner described and represented with respect to the plate *d*. The springs by which

the plates are pressed against the bottle so as hold it securely between them may either be situated vertically, as represented in Figure 3, or a spring or springs may be situated in the base a of the holder, and be made to act upon the joint or joints of the plates, and thereby press the said plates inwards. In order that the bottle carried by the holder may be held steadily therein, and to accommodate bottles of varying heights, as well as varying depths in the concave bottoms of the bottles, we provide the base of the holder with a central spring stem i, having flanges at top and bottom. The said stem i passes through the bottom a^2 of the holder, and is pressed upwards by the spring k, one end of the said spring bearing against the bottom a^2, and the other end against the flange l on the top of the stem. When a bottle is introduced into the holder, the concave bottom of the bottle rests upon the flange l and depresses the stem i, the spring of the said stem being thereby compressed between the flange l and bottom a^2. The elasticity of the said spring tends to raise the stem i, which latter raises the bottle and presses it into the holder, and supports it firmly in the said holder. This spring stem i, k, l, may be used with bottle holders of various constructions, and constitutes part of our Invention, whether applied to the bottle holders herein-after described or to bottle holders of other construction.

Figure 4 represents, partly in elevation and partly in section, another bottle holder constructed according to our Invention, and Figure 5 represents a plan of the under side of the same. In this form of our Invention the holder has the general figure of the bottle, and the bottle is introduced into the holder from below instead of from the top, as in the last-described holder. m is the body of the holder, having a bottom n hinged at n^2 to the base of the body. The said bottom n is provided with a spring bolt or catch o for fastening the said bottom in its place. The said bolt or catch o consists of a bar, having a small button or stud p for withdrawing it from the staple q, the said staple being formed in the base of the holder. The bolt or catch o is made self-acting by means of the spring r working in the case s. The said spring r presses upon the back of the bolt, and when the bottom n is closed urges the said bolt forward into its staple q, and fastens the said bottom to the body. By withdrawing the bolt o and turning down the bottom n the bottle may be introduced into the holder. When the bottom n is closed it is fastened in its place by the spring catch or bolt o. The bottom n of the holder carries a spring stem t, of the construction herein-before explained, for supporting the bottle firmly in the holder. Instead of providing a holder of the last-described construction with a complete bottom, a bar only across the base of the holder may be employed.

This modification is represented in plan of under side in Figure 6 of the Drawings, where *u* is the bar hinged to the base of the body, *v* the spring bolt or catch, and *w* the spring stem carried by the said bar.

Figure 7 represents, partly in elevation and partly in section, another form of bottle holder constructed according to our Invention; Figure 8 represents an elevation of the body of the same separately, and Figure 9 represents a plan of the upper side of the base of the same separately. In this form of our Invention the body *x* and base *y* are made detached, and connected with and disconnected from each other by a fastening resembling in construction and action the bayonet-joint fastening. The said fastening consists of two studs or projections 2, 2, on opposite sides of the bottom of the body *x* and two slots 3, 3, at opposite sides of the base *y*. By placing the body *x* upon the base *y*, and introducing the studs 2, 2, on the said body into the wide parts of the slots 3, 3, on the base *y* and partly turning the said body, the necks or narrow parts of the said studs 2, 2, enter the narrow parts of the slots 3, 3, and thereby fasten the parts *x*, *y*, together, the heads of the said studs being made to engage under the parts 4 of the base by the motion of the said body, as seen in Figure 7. Instead of connecting the base with the body of the holder by bayonet-joint fastenings, the base and its spring may be fixed to the bottom of the body, and the shoulder of the holder made removeable by means of bayonet-joint fastenings. In this case the bottle is introduced into the holder at the top. Across the base *y* is a bar 5 upon which the spring stem 6 is supported. The bottle to be held in the holder may either be placed on the base *y* and the body *x* placed upon it, and fastened to the said base by pressing down the spring stem 6, and partially turning the body *x* in the manner before explained, or the bottle may be introduced into the body *x* and the base *y* placed under the bottom of the body, and fastened to the body by pressing it against the body and partially turning it.

Figures 10 and 11 represent elevations taken at right angles to one another of another form of bottle holder made according to our Invention, and Figure 12 represents a plan of the same; Figure 13 represents the holder partly open ready for the introduction of the bottle. The body of the holder is made in two halves or parts 7, 8, having the general figure of a bottle, the part 8 being fixed to the base 10, and the part 7 turning upon a hinge 11 on the base 10. In order to introduce the bottle, the moveable part or half 7 is turned upon its hinge 11 into the piston represented in Figure 13. After the bottle has been introduced into the holder, and has pressed down the spring stem 12, the moveable half 7 is closed upon the said bottle and the two halves 7, 8, fastened together by the elastic collar 13 turning on a joint on the fixed

part 8, being made partly to embrace the neck of the holder and its hooked end 14 engaged with the loop or staple 15 on the opposite side of the said fixed part 8, as will be understood by an examination of Figure 12.

By pressing upon the hooked end 14 of the collar 13, the two halves 7, 8, are unfastened and the moveable half 7 partly opened by the spring stem 12, raising the bottle in the holder. Instead of making one half only turn upon a hinge, both the parts 7, 8, may be made to turn upon hinges.

We do not limit ourselves to the elastic collar 13, 14, for fastening the two halves together, as other means may be employed. Instead of making the moveable half of the body in the last-described form of our Invention turn upon the base in a vertical plane, the said moveable half may turn in a horizontal plane; in this case the moveable half or other portion of the holder is hinged to the fixed part. Instead of making the springs by which the bottle is pressed upwards in the holder of a helical figure, the said springs may be made of a spiral or conical figure, and the central rod within the spring may be dispensed with without materially affecting the action of the said spring.

In the accompanying Drawings we have represented the bottle holders plain or of the simplest patterns in order that the construction of the said holders may be the better understood, but the cases are capable of being made highly ornamental.

Having now described the nature of our Invention, and the manner in which the same is to be performed, we wish it be understood that we do not limit ourselves to the precise details herein described and illustrated in the Drawings, as the same may be varied without departing from the nature of our Invention; but we claim as our Invention,—

Firstly, the improvements in bottle holders, herein-before described and illustrated in Figures 1, 2, 3, 10, 11, 12 and 13 of the accompanying Drawings, that is to say, making the bottle holders of a base and two or more vertical curved plates, one of the said plates being hinged to the base, and the others fixed to the said base, or making the whole of the plates capable of turning on the base or hinging them to one another, the said plates being raised or closed by hand or by springs.

Secondly, the improvements in bottle holders herein-before described and illustrated in Figures 4, 5, and 6 of the accompanying Drawings, that is to say, making the body of the bottle holder of the general figure of the bottle, and hinging a bottom or cross bar to the said body, the said bottom or bar being fastened to the body by a spring catch or bolt.

Thirdly, the improvements in bottle holders herein-before described and illustrated in Figures 7, 8, and 9 of the accompanying Drawings, that is to

say, making the base and body of the said holders of detached parts, and connecting them to and disconnecting them from each other by fastenings constructed substantially in the way described and illustrated; also connecting and disconnecting the bodies and shoulders of the said holders by means of fastenings of the kind described with reference to Figures 7, 8, and 9 of the accompanying Drawings.

Lastly, the addition to bottle holders, whether of the construction herein-before described and illustrated in the accompanying Drawings or of other construction, of a spring or a spring stem for supporting the bottle firmly in the holder, and for enabling bottle holders to accommodate bottles of different lengths and of varying depths of concave bottoms, as herein-before described and illustrated in the accompanying Drawings.

In witness whereof, I, the said Henry Millington Harwood, have hereunto set my hand and seal, this Twenty-third day of November, in the year of our Lord One thousand eight hundred and sixty-four.

HENRY MILLINGTON HARWOOD. (L.S.)

Witness,

RICHARD SKERRETT,
Clerk to George Shaw,
Birmingham.

LONDON:
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Printers to the Queen's most Excellent Majesty. 1864.

FIG. 1.

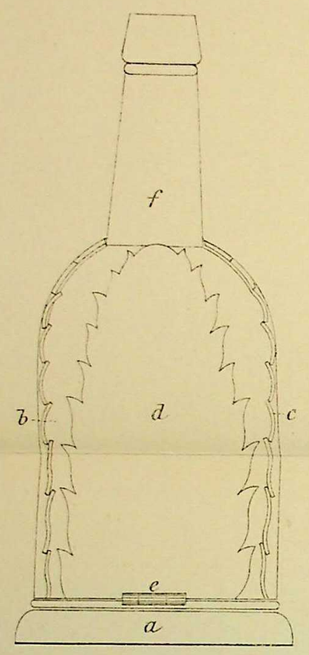


FIG. 3.

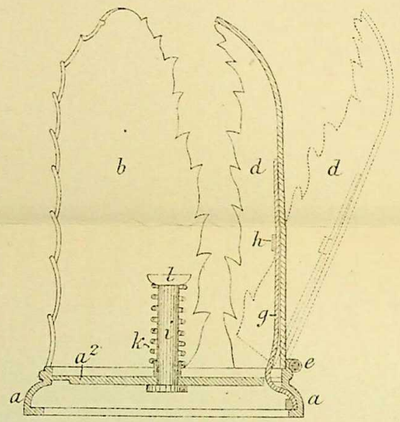


FIG. 4.

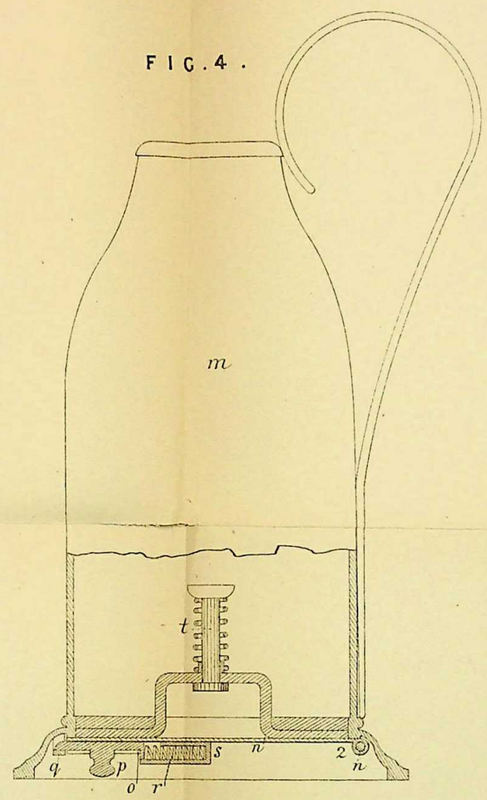


FIG. 7.

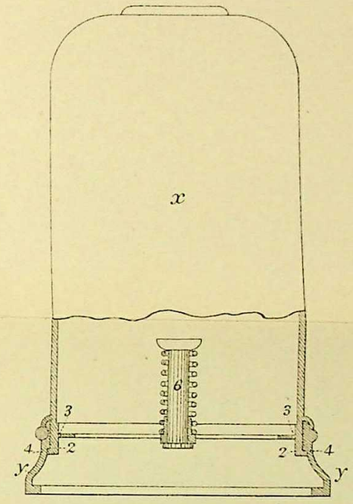


FIG. 8.

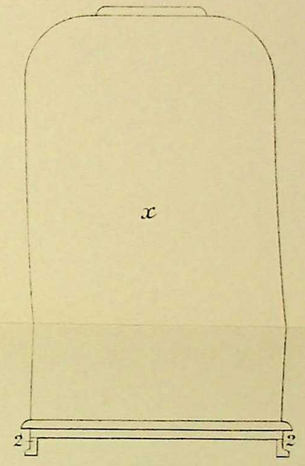


FIG. 2.

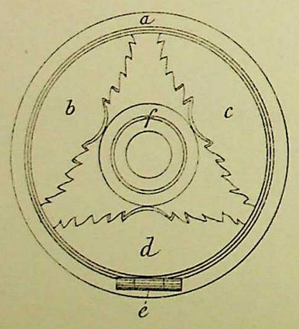


FIG. 6.

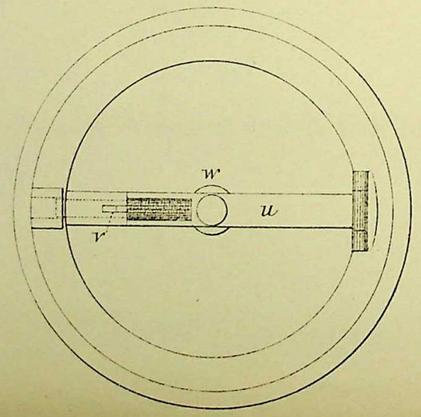


FIG. 5.

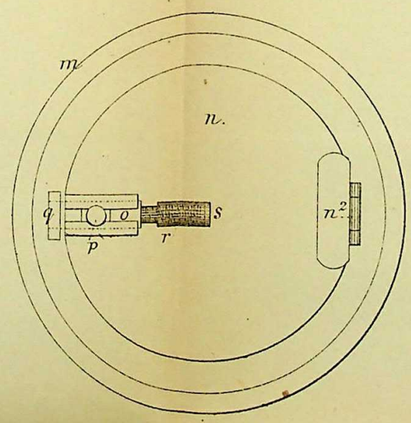
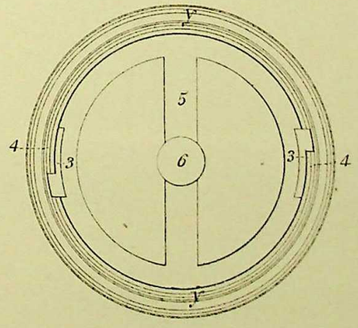


FIG. 9.



filed drawing is partly colored.

Drawn on Stone by Malby & S

LONDON: Printed by George Edward Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty. 1864.

A.D. 1864. May 27. N° 1313.
HARWOOD & WHITFORD'S Specification.

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SHEET 2.

FIG. 10.

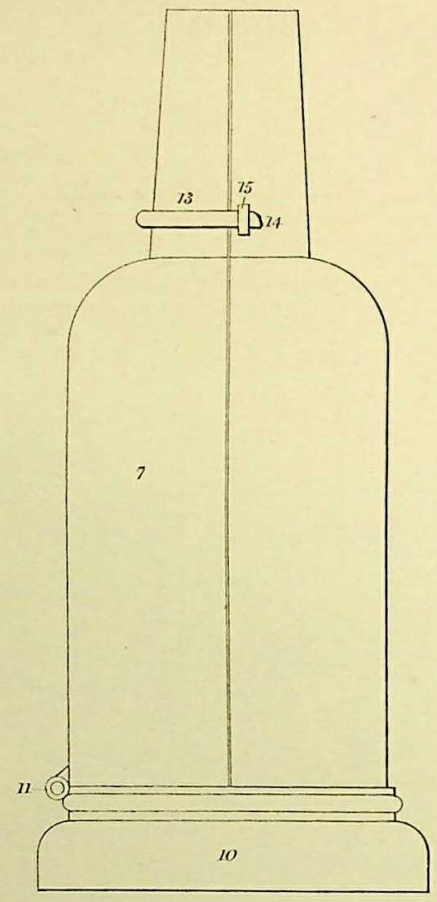


FIG. 11

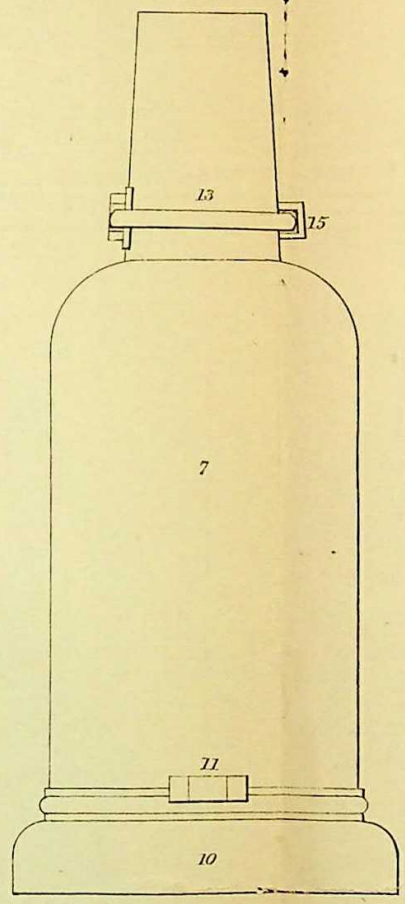


FIG. 13.

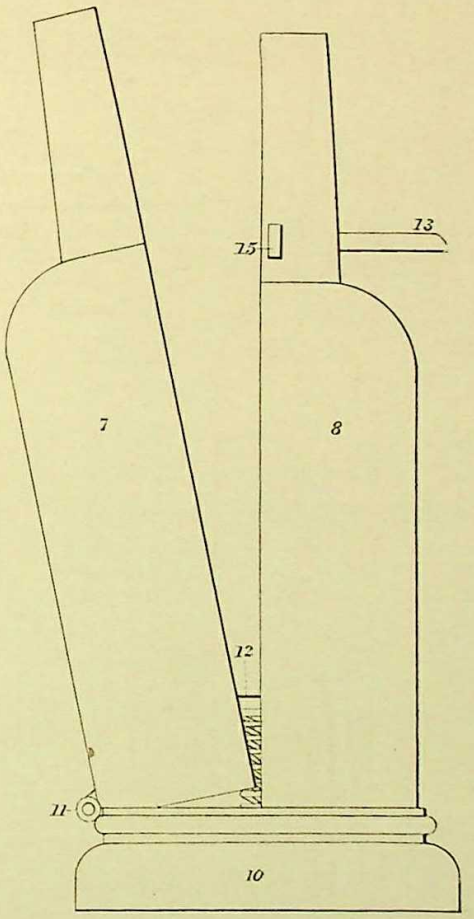
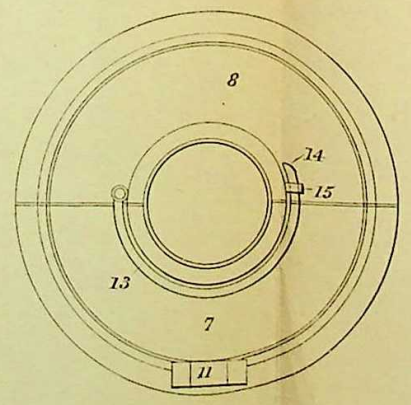


FIG. 12.



The filed drawing is not colored

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